



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

February 20, 2008

MEMORANDUM

SUBJECT: Effects Determinations for Hexazinone Relative to the California Red-Legged Frog and Designated Critical Habitat

FROM: Mah Shamim, Ph.D.
Chief, Environmental Risk Branch 5
Environmental Fate and Effects Division *MShamim* 02/20/08

TO: Arthur-Jean B. Williams, Associate Director
Environmental Fate and Effects Division

Attached is the assessment of potential direct and indirect effects to the California red-legged frog (CRLF) and potential adverse modification to designated critical habitat from uses of the herbicide hexazinone. While the Endangered Species Act requires we assess uses of pesticides relative to any potentially affected listed species, this assessment focuses only on the CRLF, including designated critical habitat, addressing provisions of a settlement agreement entered into by the federal government to resolve claims made by plaintiffs against EPA in a court case (CBD v. EPA¹).

The attached assessment was conducted consistent with the Agency's Overview Document². Effects determinations for this assessment are summarized below:

- The overall CRLF effects determination for hexazinone uses is "LAA".
- A "No Effect" determination for direct effects to the aquatic-phase CRLF using the fish as a surrogate.
- An "LAA" determination for indirect effects to the aquatic-phase CRLF based on effects to its prey based non-vascular plants
- An "LAA" determination for indirect effects to the aquatic-phase CRLF based on effects to habitat.
- An "LAA" determination based on direct terrestrial effects using the bird as a surrogate for the CRLF.
- An "LAA" determination for indirect effects to the terrestrial-phase CRLF based on effects to its prey

¹ Settlement agreement of October 20, 2006: Center for Biological Diversity v. United States Environmental Protection Agency. Civ. No: 02-1580-JSW(JL).

² Overview of the Ecological Risk Assessment: Process in the Office of Pesticide Programs, U.S. Environmental Protection Agency: Endangered and Threatened Species Effects Determinations: January 23, 2004.

- An “LAA” determination for indirect effects to the terrestrial-phase CRLF based on effects to habitat.
- Consideration of CRLF critical habitat indicates a determination of “habitat modification” for aquatic and terrestrial habitats.

As required by the Alternative Consultation Agreement EPA entered into with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (Services), I have been trained by the Services to make such determinations. Additionally, this assessment was subjected to internal Agency peer review throughout its development. The review panel included one other scientist who has been trained by the Services to make such determinations.

Please let me know if you have any questions regarding this assessment and effects determination for hexazinone relative to the CRLF and its designated critical habitat.

cc:

Peter Caulkins

Attachments